

# VEHICLE AND METHOD FOR OPERATING AN ENGINE IN A VEHICLE

## Abstract

A vehicle and method are provided that determine a misfire torque limit for an engine in the vehicle. The vehicle includes an electric machine operable to provide torque to the engine. The method includes commanding the engine to operate at a predetermined torque and a predetermined speed, thereby putting the engine in an idle state. An output torque of the engine is then determined while the engine is in the idle state. A torque offset, defined as the difference between the torque command and the determined engine output torque, is also determined. The misfire torque limit for the engine is then determined based at least in part on the torque offset.